



MISSOURI DEPARTMENT OF NATURAL RESOURCES

Agriculture Kitchen Cabinet Meeting Notes Lewis & Clark State Office Building, March 14, 2014 11 a.m. to 4 p.m.

Welcome and Introductions

The meeting began with a welcome from Department of Natural Resources Director Sara Parker Pauley, followed by introductions of those in attendance. This is the third year for the four industry kitchen cabinet meetings hosted by the department, and last year an all kitchen cabinet meeting was added.

Our Missouri Waters

Jennifer Hoggatt provided an overview of Our Missouri Waters (OMW) activities during the pilot year, as well as the watersheds slated for work to begin in 2014. (The presentation is posted on the Kitchen Cabinet web page.)

Discussion following the presentation included the following:

- In the Spring River watershed, extension services at both Kansas State University and University of Missouri are assisting with data development.
 - Concern was expressed that strong agricultural representation is lacking at OMW meetings, that selection of best management practices (BMPs) in the Spring River is not based on science, and that media is present during the meetings, making people reluctant to participate in the discussion.
 - It was suggested that DNR attend meetings of agricultural organizations to talk about and get input on Our Missouri Waters. In addition, agriculture organizations are encouraged to contact their watershed coordinator directly with their concerns.
 - Participants suggested that meetings hosted by agricultural organizations would be more effective than trying to call regional meetings. Ag is not one entity, but rather many specialties, each with different needs and perspectives.
- Participants cautioned DNR not to assume that any particular entity represents an area. For example, in some counties the commissioners may have recently moved into the area and therefore are not part of the local agricultural community.
- Participants suggested that telling agricultural groups that OMW “allows DNR to focus more closely” on issues may not be well received. Collecting data is fine, but what is the department going to do with this information and priorities established? What is DNR’s goal? Agricultural producers need to understand OMW in a more tangible way.
- DNR needs to illustrate the value of OMW –it is not increased regulation, but beneficial responses. The department could use the agriculture community’s help in messaging appropriately. One goal of OMW is to direct DNR’s resources to meet the greatest concerns of local citizens address needs at a local level.

- Identifying priorities is a shared process – not DNR’s alone. It may not be DNR implementing the actions.
 - DNR needs to show successes.
 - DNR is working to integrate various tools that the department has – for example, in Webb City, Natural Resource Damages funds held by the department and US Fish and Wildlife will be used to purchase 900 – 1100 acres of remediated mine waste land along Bens Branch and Center Creek in Webb City. Lands will be restored to native habitat. Along with naïve habitat restoration, the goal is to reduce zinc loading to Center Creek. The land will be restored to prairie and some treatment wetlands installed to reduce high zinc levels. Webb City will hold fee title of the property with a conservation easement held by the department to ensure that it remains habitat.
- Municipalities have seen an increase in regulation, and are trying to prioritize. They’ve called on their mayors’ association to discuss with EPA their increased need for flexibility. EPA is allowing communities to prioritize and develop their own plan. For example, Springfield is one of the first in the country to include air, stormwater, wastewater and solid waste issues in their integrated plan.
- The department is synchronizing permits within watersheds which will promote one discussion with all parties together.
- The watersheds were chosen within the department with multiple divisions and programs reviewing an extensive list of criteria. In addition, modeling conducted by a technical work group identified the same top three every time.
 - New watersheds listed in 2014 will add to the pilot watershed discussions.
 - In five years, all 66 watersheds will be involved in OMW.
 - In the second five year rotation, the focus will be on areas with shared priorities and apply resources in a strategic way, addressing identified needs.
- Participants observed that getting agriculture producers involved, who already deal with many government agencies, will be difficult, as their time is limited.
- DNR clarified that development of a Watershed Management Plan is not the goal in every watershed. Development of a plan is voluntary – it provides guidance and general direction.
- The management plan is voluntary for land owners. However, when preparing a watershed assessment, individual land owners can’t “volunteer” in or out of the assessment itself.

Legislative Update

Mary Mulhearn was introduced as the department’s legislative liaison. A bill by Sen. Munzlinger, SB 914, would make it a misdemeanor to deposit sediment into a waterway. Another bill, SB 902, modifies the laws regarding certain private nuisance actions. SB 964 would add captive cervids to the definition of livestock. EPA is expected to introduce revised definitions of “waters of the United States” soon, and a listening session is being planned at MU.

Participant Updates

Everyone in attendance was given an opportunity to share their associations' concerns / kudos regarding interactions with the department; priority issues they're addressing; upcoming event notices, etc..

Facilitated Discussion about Nutrients

The group was asked "Where do we as partners want to be at the end of 2016 regarding nutrients?" This was the topic identified by most agriculture respondents to the survey distributed by email to all kitchen cabinet members.

- A participant commented that DNR should look at regulations used in surrounding states and assess our status, not just in EPA Region VII, but also in states with larger numbers of dairy operations, for example.
 - Illinois produced an Agriculture Water Quality Report which includes an inventory of projects, many watershed based. Fertilizer fees were doubled to fund projects. Illinois is one of the first states to use the "4Rs" and matching 4R funding. Both agriculture retailers and farmers are involved. Illinois is not the same as Missouri, but we could learn from them.
- A participant added that DNR should go proactive on water quality – show how to keep fertilizer and manure in place (i.e. cover crops – there's currently lots of excitement about cover crops, which can make a big difference in soil loss).
- A participant commented that in the last 15 years, the amount of nutrients used in the United States has decreased, while the issues in the Gulf have increased. We need answers on a national level, not state by state.
- Joe Engeln represents the department on the Mississippi River Gulf Hypoxia Task Force. Mr. Engeln commented on how there are a lot more data now, pointing to tile drainage as being more of a source of nutrients than previously expected. Contributions to Gulf Hypoxia by other types of agriculture are lower than a decade ago. Missouri is taking a different approach to its strategy than neighboring states by having the impacted groups determine the actions they are willing to take. This will lead to a more believable strategy that is more likely to be implemented. Science is now leading the effort. Less fertilizer is being used to produce more crops.
 - If farmers cannot be economically successful on farms, then the strategy won't matter.
 - There is growing recognition that science has changed since the discussion started.
 - How does the level of nitrogen 20 years ago compare to today? The concentrations haven't changed significantly – the issue is tied to flow, to volume.
 - There are now more stable forms of nitrogen available as well as other improvements, but during big storms, nutrient loss occurs. In the Gulf, nutrients keep cycling, so it is a legacy issue. There is a lot of lag time, possibly due to groundwater flow. USGS is studying this possibility.
- Discussion focused on the need to share with the public that Missouri farmers are not the lead contributors to Gulf Hypoxia.

- DNR stated that EPA is fighting the Chesapeake Bay approach in Missouri and Missouri's DRAFT Nutrient Loss Reduction Strategy report should be released around June and is built upon current actions. Urban non-point run-off may be a bigger issue in Missouri than in other states (combined storm water and sanitary sewers being an issue for many communities).
- When the nutrient strategy is released it would be a good time for the agricultural community to assist the department with spreading the message that Missouri farmers are using Best Management Practices (BMPs) to minimize nutrient run-off. The Soil and Water portion of that tax has put over \$250million onto farms in the last decade with a 25% additional contribution from farmers to keep soils on the land and improve water quality.
- The department would like to target information so that Soil & Water Districts can make the best decisions for their area on what BMPs are appropriate, as there are challenges with each practice.
- Some members thought DNR would have easier access to the media than the agricultural interests.
- The new federal farm bill may have some impacts on Gulf Hypoxia.
- A participant noted that Missouri has put more money "on the ground" than any other state by using soil & water conservation monies, both federal and state but we haven't measured the performance of these measures – we need to quantify what we've already done and are doing.
- Concerns regarding cost-share on conservation practices were raised. In counties where soil & water funds are heavily used, there is a three year waiting list for funding, so most farmers are proceeding on their own.
- It was noted that farmers are seeing benefits of cover crops – keeping soil in place for future generations.
 - The public currently spends about 10% of their disposable income on food – it is no longer 20-25% due to increases in productivity.
 - DNR sets the example, and primes the pump using grants.
- A participant stated that we need to share success stories to capitalize on these investments – maybe a State of the State report on this issue.
 - What is the return on investment? That's the type of question that gets asked in Congress.
 - How many acres have received BMPs without cost-share?
- If nutrient concentrations are not greater than they were 20 years ago, this is a big deal. This news should be publicized in publications, complimenting agriculture.
- The question was asked to DNR: What about the EPA nutrient criteria has been disapproved? Since Missouri has been partially disapproved, how do we deal with that?
 - Missouri has a partially approved lake nutrient criteria, but not stream nutrient criteria. EPA requested more evidence on how DNR arrived at the lake / stream data. All water quality standards are locally focused – not on hypoxia concerns. For example, does Missouri have water quality problems at drinking water plants,

or fisheries? The Department of Conservation (MDC) has nutrient issues in fish – as nutrients help determine fish size distribution.

- What about the huge flocks of snow geese? MDC has stated that one goose produces about one quart of goose poop per day. In state parks, efforts to make geese less comfortable near the beaches resulted in a reduced goose population on the beaches.
- How should the department communicate the Nutrient Reduction Strategy to this group? For example, the Business & Industry Kitchen Cabinet members said if the department shared this type of information with them, they could put it in their newsletters, and the agricultural industry could do the same.
 - It is always good to see positive news in agriculture industry publications regarding agriculture and the environment.
 - One producer noted that he has four nutrient management plans – why do they have to be so thick? These plans could be done effectively with less paperwork – that scares people off. Farmers test their soil, they know what that particular crop will uptake, so don't make it so formal.
- DNR is conducting stakeholder workgroup meetings regarding CAFO rulemaking due to changes at the EPA & HB 28 in 2013.

DNR Program Updates

Several department program and division directors provided updates for Kitchen Cabinet members. Highlights from these presentations follow.

- Soil & Water Conservation Program
 - Missouri has more soil conservation measures in place than any other state, using grants of about \$27 million. The estimated need for additional measures is \$69 million.
 - What about gravel / stream bank management?
 - Stream bank projects have proved very expensive – so while this is a conservation practice, it is also an emerging issue.
 - What are the benefits of technical work vs. spending grant funds?
 - Nutrient Tracking Tool, which is web-based is now available but still undergoing some improvements. The web-based NTT application compares agricultural management systems to calculate a change in Nutrient loss potential.

The website can be found by searching for “Missouri Nutrient Tracking Tool” or the link below.

http://nn.tarleton.edu/nttcapturesoils/Default.aspx?url=ntt_tiaerdev

- Water quality standards –
 - The department's stream classification study became effective at the end of February and has been submitted to the EPA. Missouri is in compliance with the Clean Water Act – the last state without EPA imposed standards.

- DNR has to revise the Clean Water Act standards every three years, which requires back-to-back rulemaking. Several updates of the rule are needed. Invitations for the next discussion on the rulemaking will be sent soon.
- Water quantity is an issue in several areas of the state, being studied in northwest Missouri from St. Joseph to Cameron along Hwy. 36. The study is expected to be completed in October, 2015. Other efforts support rural water supplies.
- In southwest Missouri, the Joplin area is experiencing a 20 million gallon per day deficit, which would have dire consequences if there were a drought. Most of the deficit is due to municipal and industrial demand, although a growing population and irrigation are contributing factors.
- The department's Missouri Geological Survey (MGS) is conducting the first update of well drilling rules in 20 years.
- The department has finished House Budget Hearings for 2014.
- Missouri Geologic Survey is pleased now that GeoStrat is now available online at <http://www.dnr.mo.gov/geostrat>. This will allow the public to identify springs, sinkholes and other below grade structures and to acquire more useable data. Searches can be conducted on individual well records, well drillers or pump installers.

Additional Information / Web Links

- Missouri Water Protection Forum - <http://dnr.mo.gov/env/wpp/cwforum/index.html>
- Air Program Advisory Forum - <http://dnr.mo.gov/env/apcp/airadvisory/apcpstakeholder.htm>
- Missouri Nutrient Loss Reduction Strategy - <http://www.dnr.mo.gov/env/wpp/mnrsc/index.htm>